

GREAT LAKES LEVELS UPDATE, NO. 5 3 December 1985

The Great Lakes, except Lake Ontario, remain extremely high. Lakes Superior, Michigan-Huron, St. Clair and Erie again set new monthly record high levels in November as heavy rainfall continues. Storms during this season continue to be of concern since the high lake levels could compound storm damage to shoreline property.

The attached bulletin shows our projected levels for the period December 1, 1985 through May 31, 1986. All the upper Great Lakes are predicted to remain extremely high for the next six months. In addition, Lake Ontario is expected to begin a sharp rise to much above normal levels by the Spring of 1986. The Lake Superior November monthly mean level was 602.09 feet, which is $3\frac{1}{2}$ inches above the previous November record of 601.81 feet, set in 1974. Lakes Michigan-Huron's November level was 580.62 feet, 5 inches above the previous record of 580.20 feet that was set in 1973. Lake St. Clair and Lake Erie levels were 575.92 feet and 572.56 feet, respectively. The Lake St. Clair level was 9 inches above its previous record of 575.18 feet, set in 1972. The Lake Erie level was 5 inches above its previous record November high level of 572.17 feet, that was also set in 1972. For the past few months, Lake Ontario had remained near its normal levels; however, continued high inflows from the upstream lakes and heavy rainfall on its basin in November caused the Lake Ontario level to rise to 244.50 feet, or about 5 inches above normal.

Since early October, the outflow of Lake Superior has been at a record rate of about 134,000 cfs. Flow through the Sabin navigation lock continues although it had to be stopped on several occasions for short periods of time due to high levels on the lower St. Marys River.

By the end of November, the effects of the IJC's emergency action were:

Lakes Superior Lakes Michigan-Huron Lake St. Clair

Down 1 inch Down 1½ inches

Up 2 inches

Lake Erie

Down 14 inches
Down 14 inches

The maximum effect of the emergency action for Lake Superior at the end of August was $+4\frac{1}{4}$ inches and for Lakes Michigan-Huron at the end of August was -3 inches.

The Corps of Engineers is authorized under Public Law 84-99 to carry out preventive work prior to a flood threat to life or improved property - such a program, known as Advance Measures, is currently being carried out in certain shoreline communities in cooperation with the States of Michigan and Ohio. Potential flooding problems exist primarily along the shores of Lake Erie, the Detroit River, and Lake St. Clair.

The Corps of Engineers' Detroit and Buffalo Districts are continuing to pursue a program for providing emergency flood protection measures to the States of Michigan and Ohio. In Michigan, construction is about 45% completed at Luna Pier and about 31% at Milleman in Brownstown Township. Project development continues at Detroit Beach in Frenchtown Township, Estral Beach, and Labo Island in Brownstown Township. In Ohio, three projects were approved. They are: Reno Beach/Howard Farms, Whites Landing, and Bayview. Project Development continues at Eastlake. All other potential locations are either ineligible or have declined participation in the program.

The Corps is also authorized to assist local communities in disaster preparedness and in responding to actual flooding situations. This includes providing technical assistance, supplies and equipment (for example, sandbags, pumps and heavy construction equipment).

For Great Lakes basin technical assistance or information, please contact one of the following Corps of Engineers District offices:

- (1) States of New York, Pennsylvania, and Ohio Colonel Daniel R. Clark Commander, Buffalo District 1776 Niagara Street Buffalo, New York 14207-3199 (716) 876-5454 Ext. 2201
- (2) States of Michigan, Minnesota, and Wisconsin Colonel Robert F. Harris Commander, Detroit District Post Office Box 1027 Detroit, Michigan 48231-1027 (313) 226-6762
- (3) States of Illinois and Indiana Lieutenant Colonel Frank R. Finch Commander, Chicago District 219 South Dearborn (6th Floor) Chicago, Illinois 60604-1797

The updates will be continued for the next few months to provide additional information on the actions being taken to help alleviate high water level conditions and to provide flood protection and assistance.

rigadier General, USA

Commanding